

REMARKS

Claims 1-67 were considered in the Office action dated March 24, 2004. The Office action rejects claims 1-49, 53-59, and 61-67. The Office action states on page 62 that claims 50-52 and 60 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

Accordingly, Applicants hereby cancel claims 1-46, 50, 55, 60, and 67, without prejudice, and amend claims 47, 51, 52, 56, 62, and 65, as shown in the preceding Listing of Claims, in order to place the application in condition for allowance. No new matter is added thereby.

Applicants also add new dependent claims 68-73 and new independent claim 74. No new matter is added thereby.

Following entry of this Amendment After Final, claims 47-49, 51-54, 56-59, 61-66, and 68-74 will be pending in this application.

Applicants amend independent claim 47 to include the limitation, **“wherein the explicit scheme comprises a thermal clock that varies locally and may proceed differently than a global clock,”** from claim 50, which depended directly from claim 47 and was found to be allowable if rewritten in independent form. Applicants cancel claim 50 as redundant and amend dependent claims 51 and 52 to depend directly from claim 47.

Applicants amend independent claim 56 to include the limitation, **“removing from the solution domain nodes corresponding to elements which contain no unfrozen material,”** from claim 60, which depended directly from claim 56 and was found to be allowable if rewritten in independent form. Applicants cancel claim 60 as redundant and amend dependent claim 62 to remove dependence from cancelled claims.

Applicants amend independent claim 65 to include the limitation, **“wherein the explicit scheme comprises a thermal clock that varies locally and may proceed differently than a global clock,”** from claim 50, which was found to be allowable if rewritten in independent form. Claim 65 is an apparatus claim that includes a processor for performing steps of the method of claim 47.

Applicants add new dependent claims 68-73, which depend from currently amended claims 47 and 56. Claims 68-73 are supported in the specification as originally filed, for example, at page 18 (lines 2-7), page 39 (lines 1-5), page 42 (lines 12-17), page 52 (lines 1-15), and in original claims 9 and 17. No new matter is added thereby.

Applicants add new independent claim 74. Claim 74 is supported in the specification as originally filed; no new matter is added thereby. Claim 74 is an apparatus claim that includes a processor for performing steps of the method of currently amended claim 56.

Conclusion

Applicants request that the Examiner reconsider the Application and claims in light of the foregoing Amendment After Final. Applicants respectfully submit that in view of the amendments and remarks herein, all of claims 47-49, 51-54, 56-59, 61-66, and 68-74 are in condition for allowance.

If the Examiner believes that it would be helpful to discuss any aspect of the Application by telephone, the undersigned representative cordially invites the Examiner to call at the telephone number given below.

Respectfully submitted,



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Date: May 12, 2004

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